

Recombinant Human FLT1 Protein, C-His-tagged

Product Information

IMP-4511 Cat

FLT1 Official Symbol

Recombinant human FLT1 (NP_002010.2) (Met1-lle328) was expressed **Product Overview**

with a polyhistidine tag at the C-terminus.

Vascular endothelial growth factor receptor 1, also known as VEGFR-1, Description

Fms-like tyrosine kinase 1, Tyrosine-protein kinase FRT, Tyrosine-protein kinase receptor FLT, Vascular permeability factor receptor and FLT1, is a single-pass type I membrane protein and secreted protein which belongs to theprotein kinase superfamily, Tyr protein kinase family and CSF-1/PDGF receptor subfamily. VEGFR-1 / FLT1 contains sevenIg-like C2-type (immunoglobulin-like) domains and one protein kinase domain. VEGFR-1 / FLT1 is expressed mostly in normal lung, but also in placenta, liver, kidney, heart and brain tissues. It is specifically expressed in most of the vascular endothelial cells, and also expressed in peripheral blood monocytes. VEGFR-1 / FLT1 is not expressed in tumor cell lines. VEGFR-1 / FLT1 is an essential receptor tyrosine kinase that regulates mammalian vascular development and embryogenesis. EGF-induced angiogenesis requires inverse regulation of VEGFR-1 and VEGFR-2 in tumor-associated endothelial cells. VEGFR-1 / FLT1 is a receptor for VEGF, VEGFB and PGF. It has a tyrosine-protein kinase activity. The VEGF-kinase

ligand/receptor signaling system plays a key role in vascular development

and regulation of vascular permeability.

HEK293 Expression System

Human **Species**

C-His Tag

Ser 27 Predicted N Terminal

Lyophilized from sterile PBS, pH 7.4, 5 % trehalose, 5% mannitol and Form

0.01% Tween80.

The recombinant human FLT1 consists 313 amino acids and predicts a Molecular Mass

molecular mass of 35.6 kDa.

Met1-IIe328 Protein length

< 1.0 EU/µg of the protein as determined by the LAL method **Endotoxin**

> 90 % as determined by SDS-PAGE **Purity**

Samples are stable for up to twelve months from date of receipt at -20 to Storage

-80 centigrade. Store it under sterile conditions at -20 to -80 centigrade. It is

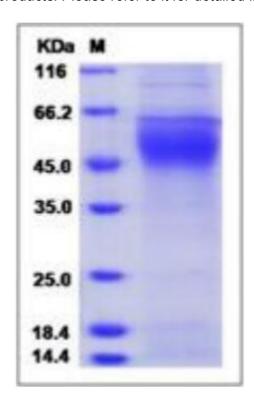


recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.

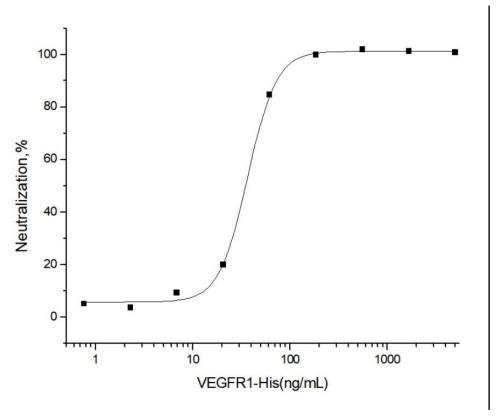
Reconstitution

SDS-PAGE



Bioactivity-Cell based assay 1





Measured by its ability to inhibit the VEGF-dependent proliferation of human umbilical vein endothelial cells (HUVEC). The ED50 for this effect is typically 10-40 ng/mL in the presence of 10 ng/mL human VEGF165.